Eurocurrency deposit rates

prime banks' bid rates, at or near end of month

		1980	1981	1982	1983	1984					
		Dec	Dec	Dec	Dec	Jan	Feb	Mar	Apr	May	Jun
Eurodollar	*overnight*	19.25	12.87	9.25	9.50	9.25	9.38	10.13	10.25	10.38	11.25
	one month	19.12	13.31	9.12	9.69	9.50	9.88	10.44	10.63	11.06	11.75
	three months	17.55	13.75	9.19	9.81	9.63	10.13	10.63	10.94	11.75	12.13
	six months	16.37	14.81	9.50	10.06	9.88	10.38	10.94	11.25	12.50	12.63
	twelve months	14.87	14.75	9.62	10.37	10.19	10.81	11.44	11.75	13.63	13.50
Euro-Canadian dollar	*one month*	17.50	15.37	10.00	9.12	9.63	9.63	10.00	10.00	10.69	11.75
	three months	16.88	15.37	10.00	9.50	9.63	9.81	10.38	10.50	11.38	12.13
	six months	15.37	16.37	10.13	9.75	9.88	10.00	10.69	10.94	12.31	12.69
	twelve months	14.00	16.37	10.25	10.00	10.06	10.38	11.19	11.44	13.38	13.50
Euro-French franc	*one month*	11.12	15.75	23.00	12.12	12.13	16.00	12.94	11.94	12.00	11.81
	three months	11.75	17.00	24.00	12.19	13.00	17.25	14.38	13.13	13.19	12.31
	six months	12.25	18.00	22.00	12.31	13.75	16.75	15.13	13.88	14.19	13.25
	twelve months	12.87	18.25	19.75	12.62	14.38	16.13	15.88	14.88	14.94	14.56
Euromark	*one month*	8.87	10.44	5.87	5.25	5.69	5.69	5.50	5.44	5.63	5.56
	three months	8.87	10.50	5.87	5.87	5.88	5.81	5.56	5.63	5.94	5.88
	six months	8.87	10.56	5.94	6.12	6.19	6.94	5.75	5.75	6.25	6.19
	twelve months	8.93	10.25	6.00	6.37	6.38	6.19	6.13	6.19	6.81	6.75
Euro-Dutch guilder	*one month*	8.87	10.75	5.12	5.81	5.88	5.94	6.06	5.75	5.94	5.94
	three months	9.31	10.75	5.19	6.00	5.94	6.00	6.06	5.94	6.13	6.13
	six months	9.37	10.75	5.38	6.25	6.13	6.06	6.19	6.06	6.88	6.44
	twelve months	9.62	10.75	5.63	6.37	6.44	6.44	6.50	6.44	6.94	6.94
Euro-Swiss franc	*one month*	6.00	8.87	2.81	3.37	3.00	3.44	3.50	3.31	3.94	4.19
	three months	6.00	9.25	3.25	3.75	3.44	3.63	3.63	3.63	4.06	4.44
	six months	5.75	9.25	3.44	3.94	3.81	3.88	3.81	3.94	4.44	4.56
	twelve months	5.50	8.50	3.44	3.94	3.94	4.13	4.13	4.19	4.75	4.75
Eurosterling	*one month*	14.75	15.37	10.56	9.12	9.19	9.13	8.75	8.56	8.94	8.81
	three months	14.75	15.69	10.44	9.31	9.38	9.19	8.88	8.81	9.81	9.44
	six months	14.25	15.69	10.31	9.50	9.56	9.31	9.06	9.06	10.44	9.94
	twelve months	14.00	15.37	10.31	9.81	9.88	9.50	9.31	9.38	10.94	10.56
Euroyen	*one month*	9.12	6.12	6.75	6.25	6.13	6.88	6.19	6.00	6.36	6.00
	three months	9.25	6.12	6.75	6.31	6.31	6.56	6.19	6.19	6.38	6.19
	six months	9.62	6.87	7.10	6.38	6.31	6.50	6.25	6.25	6.44	6.31
	twelve months	9.37	6.87	6.81	6.44	6.44	6.63	6.38	6.31	6.56	6.50
European currency unit	*one month*	11.04	14.63	12.44	8.63	8.81	9.00	10.00	8.81	9.00	9.00
	three months	11.57	14.75	12.31	9.06	9.19	9.31	10.00	9.06	9.38	9.31
	six months	11.75	15.00	12.00	9.44	9.44	9.63	10.00	9.56	9.88	9.81
	twelve months	11.65	14.56	11.19	9.63	9.63	9.94	10.13	10.00	10.25	10.25

International bond issues — by currency

new issues with a maturity of three years or more, publicly offered or privately placed in the period
millions of dollars

	1981	1982	1983	1984			Jan-Jun	
				Apr	May	Jun	1984	1983
Eurobonds	**31 616**	**51 645**	**48 501**	**6 114**	**2 642**	**4 869**	**34 817**	**25 107**
U.S. dollar	26 830	43 959	38 428	4 871	2 029	4 151	27 663	20 403
Canadian dollar	634	1 201	1 039	106	68	161	574	477
German mark	1 277	2 588	3 817	466	222	276	2 239	2 580
British pound	501	748	1 947	270	—	41	1 756	441
Japanese yen	368	374	212	133	65	43	348	148
European composite units	309	1 980	2 019	123	200	111	1 526	658
Other	1 697	795	1 039	145	58	86	711	400
Foreign bonds	**21 369**	**26 397**	**27 822**	**4 083**	**2 200**	**1 564**	**15 574**	**15 491**
U.S. dollar	7 552	5 946	4 545	1 690	200	19	3 287	2 598
German mark	1 310	2 952	2 671	132	153	110	1 018	1 641
Dutch guilder	481	956	1 053	67	227	48	562	663
British pound	746	1 214	811	184	125	117	744	222
Swiss franc	8 285	11 432	14 299	1 649	927	1 147	7 915	8 127
Japanese yen	2 457	3 418	3 772	356	542	106	1 783	1 965
Other	538	479	671	5	26	17	265	275
Total	**52 985**	**78 042**	**76 323**	**10 197**	**4 842**	**6 433**	**50 391**	**40 598**

International bond issues – by country of borrower

new issues with a maturity of three years or more, publicly offered or privately placed in the period
millions of dollars

	1981	1982	1983	1984			Jan-Jun	
				Apr	May	Jun	1984	1983
Industrial countries	**40 861**	**63 062**	**60 303**	**8 995**	**3 937**	**6 046**	**44 149**	**32 227**
Australia	991	2 250	2 529	171	98	203	1 073	781
Austria	1 557	1 668	1 290	235	86	146	1 227	890
Belgium	527	211	1 116	146	43	400	750	383
Canada	10 648	11 979	7 487	1 091	272	469	3 833	3 789
Denmark	695	1 269	1 719	130	100	116	1 603	712
Finland	672	815	866	80	109	167	876	560
France	3 156	8 386	6 461	5	716	300	3 322	4 098
Germany	279	1 101	3 095	18	—	131	1 043	1 740
Ireland	517	625	959	—	55	37	264	290
Italy	1 108	2 214	1 565	20	59	226	887	385
Japan	6 928	8 397	13 977	2 322	1 309	1 984	11 160	8 250
Netherlands	630	894	935	150	32	—	677	482
New Zealand	1 107	1 375	645	247	65	32	475	448
Norway	530	832	624	100	65	100	467	287
Portugal	30	206	76	—	60	43	224	46
South Africa	92	374	548	69	155	139	627	336
Spain	444	747	1 470	135	—	—	702	637
Sweden	2 050	2 479	3 809	1 644	107	804	4 537	2 249
United Kingdom	1 408	1 201	1 398	390	150	—	2 036	634
United States	6 770	14 538	7 325	1 956	306	654	7 255	3 722
*Other**	722	1 501	2 409	86	150	95	1 111	1 508
Developing countries	**4 886**	**5 003**	**2 535**	**95**	**206**	**148**	**1 177**	**886**
Latin American countries	**3 658**	**2 480**	**71**	—	**31**	**19**	**50**	**71**
Argentina	195	—	—	—	—	—	—	—
Brazil	60	91	—	—	—	—	—	—
Chile	30	—	—	—	—	—	—	—
Colombia	20	35	—	—	—	—	—	—
Mexico	3 012	1 919	—	—	—	19	19	—
Panama	25	—	21	—	—	—	—	21
Venezuela	291	385	—	—	—	—	—	—
*Other***	25	50	50	—	31	—	31	50
Asian countries	**1 068**	**2 075**	**2 252**	**95**	**175**	**129**	**1 087**	**723**
Hong Kong	70	40	50	—	—	—	—	—
India	271	225	60	—	25	46	121	40
Indonesia	97	412	328	—	20	30	50	37
Korea	323	172	556	45	95	21	316	345
Malaysia	—	807	883	—	35	32	417	224
Philippines	99	50	—	—	—	—	—	—
Singapore	30	125	70	—	—	—	—	—
Thailand	93	63	265	50	—	—	183	37
Other	85	181	40	—	—	—	—	40
Middle Eastern and African countries	**160**	**448**	**212**	—	—	—	**40**	**92**
Egypt	—	75	—	—	—	—	40	—
Israel	117	200	135	—	—	—	—	75
United Arab Emirates	—	20	—	—	—	—	—	—
Other	43	153	77	—	—	—	—	17
Centrally planned countries	**75**	**65**	**75**	—	—	—	—	**25**
China	—	65	50	—	—	—	—	—
Hungary	20	—	—	—	—	—	—	—
*Other****	55	—	25	—	—	—	—	25
International organizations****	**7 163**	**9 912**	**13 410**	**1 107**	**699**	**239**	**5 025**	**7 460**
Total	**52 985**	**78 042**	**76 323**	**10 197**	**4 842**	**6 433**	**50 391**	**40 598**

*Includes multinational organizations. **Includes unallocated. ***Includes COMECON institutions. ****Includes regional development organizations.

International bond yields

average yield of several actively traded, high quality issues with a maturity of 7 to 12 years
at or near end of month

	1980	1981	1982	1983		1984					
	Dec	Dec	Dec	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
United States companies											
Eurodollar	n.a.	n.a.	11.16	11.41	11.59	11.43	11.77	12.28	12.53	13.33	13.27
Euromark	n.a.	n.a.	7.24	7.23	7.34	7.34	7.26	7.24	7.29	7.55	7.48
Swiss franc	n.a.	n.a.	5.61	5.73	5.73	5.58	5.61	5.63	5.59	5.85	5.69
European governments											
Eurodollar	n.a.	n.a.	12.53	12.52	12.65	12.33	12.58	12.96	13.27	14.18	14.14
Euromark	n.a.	n.a.	8.10	8.07	8.12	8.08	7.63	7.82	7.88	8.03	8.07
Swiss franc	n.a.	n.a.	5.36	5.52	5.59	5.43	5.33	5.34	5.35	5.59	5.55
European currency unit	n.a.	n.a.	n.a.	11.75	11.77	11.53	11.08	11.29	11.49	11.40	11.63

Eurocurrency bank credits — by country of borrower

credits with a maturity of one year or more, publicly announced in period
millions of dollars

	1981	1982	1983	1984			Jan-Jun	
				Apr	May	Jun	1984	1983
Industrial countries	**86 022**	**42 571**	**38 742**	**4 330**	**3 948**	**6 587**	**48 281**	**17 399**
Australia	1 680	4 721	2 924	115	426	—	888	1 281
Belgium	360	1 172	883	—	—	—	—	83
Canada	4 112	3 838	967	137	350	—	1 122	200
Denmark	1 661	789	1 586	—	1 000	—	1 018	1 586
Finland	463	631	283	—	—	15	15	214
France	3 912	5 703	1 700	548	—	850	1 592	1 237
Greece	1 039	770	1 085	—	—	—	400	547
Ireland	1 361	401	764	—	—	—	—	541
Italy	6 030	3 757	2 980	19	200	38	1 157	1 618
Norway	713	1 769	1 236	—	—	—	24	336
Portugal	1 590	1 388	913	—	—	300	596	300
South Africa	287	1 479	752	50	160	—	310	600
Spain	3 242	1 849	3 041	245	737	144	1 758	1 899
Sweden	1 867	649	3 188	300	—	3 000	3 300	2 350
United Kingdom	747	1 635	1 328	450	417	71	1 805	531
United States	54 724	6 516	12 948	1 295	250	2 130	32 037	2 653
Yugoslavia	554	719	615	—	10	—	10	615
*Other**	1 490	4 785	1 549	1 171	398	41	2 249	808
Developing countries	**45 264**	**41 519**	**32 937**	**5 438**	**2 323**	**560**	**18 820**	**23 079**
Latin American countries	**30 152**	**26 719**	**15 406**	**3 845**	**904**	**120**	**11 569**	**12 261**
Argentina	2 534	1 565	1 750	—	—	—	—	250
Brazil	5 751	5 716	4 475	—	—	—	6 500	4 475
Chile	2 204	1 194	1 319	—	784	—	784	1 300
Colombia	1 030	741	549	—	34	—	204	100
Ecuador	934	815	431	—	—	—	—	—
Mexico	7 530	7 953	5 138	3 800	—	50	3 850	5 100
Peru	1 407	1 069	500	10	—	—	10	466
Venezuela	7 559	6 799	237	—	—	—	—	237
*Other***	1 203	867	1 007	35	86	70	221	333
Asian countries	**10 288**	**8 403**	**8 828**	**908**	**656**	**380**	**4 825**	**5 433**
India	377	284	809	20	—	6	231	495
Indonesia	725	1 250	1 467	—	50	—	832	1 146
Korea	2 824	2 923	3 250	388	522	95	2 125	1 389
Malaysia	1 725	1 909	954	500	—	19	669	860
Pakistan	350	455	365	—	—	—	—	340
Philippines	1 257	635	819	—	—	—	—	685
Thailand	692	268	349	—	20	253	520	34
Other	2 338	679	819	—	64	7	448	484
Middle Eastern and African countries	**4 824**	**6 397**	**8 703**	**685**	**763**	**60**	**2 426**	**5 385**
Algeria	—	26	1 934	—	20	—	20	726
Egypt	63	353	335	—	19	—	19	71
Morocco	774	326	226	20	—	—	115	207
Nigeria	1 802	2 042	1 775	—	—	—	—	1 633
Turkey	100	2 042	1 106	150	100	—	600	466
United Arab Emirates	363	93	875	39	—	—	39	690
Other	1 722	3 280	2 451	476	624	60	1 633	1 592
Centrally planned countries	**1 791**	**765**	**1 212**	**385**	**184**	**30**	**1 888**	**698**
East Germany	470	8	392	—	—	15	90	392
Hungary	550	340	683	385	—	—	797	238
Soviet Union	25	374	68	—	150	—	515	68
*Other****	746	43	69	—	34	15	486	—
International organizations***	**302**	**160**	**1 321**	—	—	—	—	**1 321**
Total	**133 379**	**85 015**	**74 212**	**10 153**	**6 455**	**7 177**	**68 989**	**42 497**

*Includes multinational organizations. **Includes unallocated. ***Includes COMECON institutions. ****Includes regional development organizations.

Eurocurrency market size

measured by foreign currency liabilities
at end of period, billions of dollars

	1977	1978	1979	1980	1981	1982	1983			
						Dec	Mar	Jun	Sep	Dec
Gross market size	740	949	1 233	1 524	1 861	2 057	2 074	2 045	2 115	2 153
Nonbanks	135	174	245	327	428	474	472	489	515	527
Official monetary institutions	100	115	145	150	132	90	90	84	90	89
Other banks	505	660	843	1 047	1 301	1 493	1 512	1 472	1 510	1 537
Eurodollars as % of gross	76	74	72	75	78	79	80	80	80	80

Central bank discount rates

at or near end of month

	1980	1981	1982	1983		1984		Current	
	Dec	Dec	Dec	Sep	Dec	Mar	Jun	Jul 16 1984	effective since
United States	13.00	12.00	8.50	8.50	8.50	8.50	9.00	9.00	Apr 9, 84
Canada	17.36	14.66	10.05	9.49	9.96	10.78	12.36	13.26	Jul 12, 84
Austria	6.75	6.75	4.75	3.75	3.75	4.25	4.50	4.50	Jun 28, 84
Belgium	12.00	15.00	11.50	9.00	10.00	11.00	11.00	11.00	Feb 16, 84
Denmark	11.00	11.00	10.00	7.50	7.00	7.00	7.00	7.00	Oct 27, 83
Finland	9.25	9.25	8.50	9.50	9.50	9.50	9.50	9.50	Jul 1, 83
France	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	Aug 31, 77
Germany	7.50	7.50	5.00	4.00	4.00	4.00	4.50	4.50	Jun 29, 84
Ireland	12.75	17.15	14.35	12.20	11.50	12.00	12.00	12.00	Mar 30, 84
Italy	16.50	19.00	18.00	17.00	17.00	16.00	15.50	15.50	May 5, 84
Netherlands	8.00	9.00	5.00	5.00	5.00	5.00	5.00	5.00	Sep 9, 83
Norway	9.00	9.00	9.00	8.00	8.00	8.00	8.00	8.00	Jun 6, 83
Portugal	18.00	18.00	19.00	25.00	25.00	25.00	25.00	25.00	Aug 10, 83
Spain	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	Jul 26, 77
Sweden	12.00	11.00	10.00	8.50	8.50	8.50	9.50	9.50	Jun 29, 84
Switzerland	3.00	6.00	4.50	4.00	4.00	4.00	4.00	4.00	Mar 18, 83
United Kingdom	14.00	14.37	10.00	9.50	9.00	8.50	8.88	10.00	Jul 6, 84
Japan	7.25	5.50	5.50	5.50	5.00	5.00	5.00	5.00	Oct 22, 83
New Zealand	14.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	Jul, 81
South Africa	7.00	13.50	13.50	13.50	13.50	13.50	13.50	13.50	Dec 12, 81
Argentina	87.01	98.50	128.54	183.75	183.75	134.13	167.37	167.37	Apr 1, 84
Korea	15.50	10.50	5.00	5.00	5.00	5.00	5.00	5.00	Mar 29, 82
Philippines	4.54	6.69	6.30	6.91	8.05	8.37	n.a.	8.37	Mar, 84
Singapore	10.50	9.50	7.00	7.00	7.00	7.00	7.00	7.00	Feb 19, 82
Thailand	13.50	14.50	12.50	11.50	13.00	13.00	13.00	13.00	Dec 9, 83
Venezuela	13.00	14.00	13.00	11.00	11.00	11.00	11.00	11.00	May 18, 83

Day-to-day money rates

monthly averages

	1980	1981	1982	1983		1984					
	Dec	Dec	Dec	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
United States	18.90	12.37	8.95	9.34	9.47	9.56	9.59	9.91	10.29	10.32	11.06
Canada	15.61	14.53	10.63	9.43	8.78	9.60	9.63	9.50	9.72	9.78	10.75
Austria	11.50	7.50	6.00	5.62	5.75	5.87	5.87	6.00	6.38	6.50	6.50
Belgium	9.68	12.78	9.43	8.58	8.65	8.03	7.57	11.20	11.37	9.13	9.80
Finland	12.50	11.30	11.50	16.70	16.70	17.50	17.50	17.50	16.77	16.53	16.80
France	10.87	15.46	12.88	12.37	12.27	12.39	12.30	12.48	12.15	12.04	12.12
Germany	9.13	10.65	6.07	5.59	5.60	5.61	5.55	5.52	5.53	5.53	5.53
Ireland	13.31	16.88	14.54	12.25	12.19	12.12	11.25	10.75	12.12	11.75	10.94
Italy	17.50	20.63	19.00	17.79	17.88	17.91	17.67	17.25	17.25	16.93	16.75
Netherlands	8.37	10.67	5.31	5.70	5.84	5.77	6.12	6.13	5.79	5.62	5.85
Norway	11.00	18.60	11.00	13.00	13.00	12.80	11.45	13.00	13.00	13.00	12.50
Spain	16.74	18.73	20.30	18.56	16.41	10.16	18.14	14.75	11.54	11.93	11.91
Sweden	11.41	13.82	8.63	11.97	11.48	11.36	10.90	10.15	9.65	11.50	13.50
Switzerland	5.75	3.38	1.25	1.62	1.88	1.00	1.62	2.25	2.00	2.25	2.13
United Kingdom	13.00	9.13	6.70	7.06	7.77	7.31	7.12	7.08	6.25	3.25	5.00
Australia	9.51	12.84	11.04	9.31	4.56	7.09	9.05	11.21	13.45	13.30	11.44
Japan	9.49	6.70	6.92	5.99	6.47	6.05	6.04	6.05	5.88	5.74	5.81
South Africa	6.03	12.75	14.15	15.05	16.06	17.13	17.25	17.25	17.25	17.25	17.25
Argentina	70 84	84.93	155.32	178.30	178.30	138.61	128.53	128.52	161.88	161.88	161.88
Brazil	62.71	103.74	150.42	193.91	184.69	224.27	295.48	258.44	217.98	198.78	226.75
Hong Kong	14.05	10.75	9.13	10.00	13.90	7.25	3.31	7.32	9.00	11.00	13.00
Korea	14.82	14.40	13.84	12.90	11.40	11.30	10.50	10.00	11.70	11.90	n.a.
Philippines	15.70	14.70	16.12	18.96	31.18	25.52	21.76	9.99	17.93	33.17	n.a.
Singapore	10.23	3.96	11.45	7.23	7.05	6.92	6.83	7.64	8.13	7.82	6.80

Treasury bill rates

bond equivalent yields, at or near end of month

	1980	1981	1982	1983		1984					
	Dec	Dec	Dec	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
United States	14.87	11.90	8.15	9.05	9.28	9.20	9.48	10.09	10.02	10.13	10.29
Canada	17.01	14.41	9.80	9.38	9.71	9.73	9.79	10.53	10.59	11.29	12.11
Belgium	12.75	16.00	12.25	10.85	10.85	10.85	12.25	12.25	11.75	11.75	11.75
Ireland	12.84	17.35	14.70	11.66	11.63	11.80	12.16	12.59	12.35	12.10	12.08
Italy	16.87	21.36	19.11	17.05	16.95	15.74	15.81	15.61	15.45	14.99	n.a.
Netherlands	8.00	9.75	5.62	5.62	5.63	5.75	6.12	5.88	5.38	5.63	5.88
Spain	n.a.	n.a.	15.28	14.53	14.46	13.61	13.66	13.20	12.64	12.04	11.17
Sweden	n.a.	n.a.	12.90	12.10	11.75	11.10	11.15	10.80	10.99	11.83	14.20
United Kingdom	13.45	15.31	9.90	9.08	9.08	9.08	9.08	8.59	8.59	9.99	9.08
Australia	12.17	13.27	9.39	9.32	8.54	9.43	10.35	13.11	11.89	11.81	11.24
Japan	5.93	5.42	5.42	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91
New Zealand	11.25	11.25	11.25	7.80	7.80	7.80	7.80	7.80	7.80	7.80	7.80
South Africa	6.31	14.55	14.62	17.47	18.43	18.55	18.57	18.57	18.64	18.64	18.44
Brazil	65.87	92.62	115.40	179.15	179.15	179.15	179.15	179.15	179.15	179.15	179.15
Mexico	27.73	33.33	57.44	53.85	53.78	53.02	50.32	46.16	46.63	n.a.	n.a.
Philippines	12.70	13.22	14.54	15.63	15.99	16.27	17.01	17.25	17.61	20.81	n.a.
Singapore	6.77	3.03	2.74	2.62	2.59	2.67	2.65	2.66	2.87	3.00	3.01

Representative money market rates

bond-equivalent yields on major short-term (mostly 3-4 month) money market instruments other than Treasury bills, at or near end of month

	1980	1981	1982	1983		1984					
	Dec	Dec	Dec	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
United States	17.62	12.78	8.81	9.31	9.75	9.36	9.68	10.30	10.50	10.94	11.63
Canada	17.50	15.25	9.95	9.60	9.87	9.85	9.95	10.70	10.75	11.55	12.50
Belgium	13.10	16.00	12.35	10.75	11.00	11.00	12.50	12.35	11.90	11.90	11.90
France	11.56	15.25	12.75	12.31	12.19	12.25	12.54	12.56	12.31	12.25	12.06
Germany	10.20	10.50	6.20	6.25	6.30	6.10	5.85	5.80	5.70	6.25	6.10
Ireland	13.62	18.50	15.75	12.37	12.19	12.25	12.56	13.00	12.88	12.75	12.50
Italy	17.37	21.00	19.00	17.88	17.88	17.88	17.00	17.25	17.25	16.75	16.63
Netherlands	9.37	11.00	5.25	6.31	6.00	5.94	6.00	6.06	5.88	6.13	6.19
Portugal	11.00	13.80	15.04	24.17	24.11	24.06	23.79	23.99	24.04	24.00	25.25
Spain	17.40	15.52	16.55	20.29	18.48	17.30	18.30	16.42	15.07	14.66	13.45
Switzerland	7.50	10.12	3.87	4.25	3.87	3.62	3.75	3.94	3.88	4.25	4.50
United Kingdom	14.75	15.69	10.50	9.25	9.31	9.37	9.21	8.88	8.81	9.75	9.44
Australia	13.00	16.00	10.65	10.60	9.50	11.00	13.00	13.55	14.20	13.55	12.70
Japan	9.80	6.30	6.80	6.42	6.42	6.30	6.40	6.40	6.20	6.35	6.40
New Zealand	14.25	16.05	16.75	12.00	12.10	13.85	15.00	14.75	15.00	17.00	17.00
South Africa	7.12	15.47	15.26	18.19	19.12	19.07	19.01	18.30	19.07	18.00	17.90
Chile	26.79	34.54	71.44	25.34	22.42	19.56	14.03	11.35	18.16	18.16	18.16
Hong Kong	17.69	14.18	10.13	11.50	12.84	11.37	7.87	7.90	9.93	12.38	13.13
Indonesia	12.54	14.48	18.50	15.00	19.50	19.00	20.50	19.50	18.50	19.00	20.00
Korea	16.35	15.69	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Malaysia	9.41	9.50	8.50	8.65	9.80	9.47	8.51	8.95	9.10	9.20	9.70
Philippines	14.99	17.70	15.96	17.34	15.61	16.08	17.41	17.14	15.83	26.51	n.a.
Singapore	14.12	7.81	8.69	7.62	8.44	7.75	7.75	8.50	8.63	9.13	9.00
Taiwan	14.49	10.94	9.94	7.26	7.65	9.22	9.42	7.81	7.31	6.15	7.77
Thailand	16.55	14.29	12.25	14.50	16.00	16.50	17.00	15.50	13.50	14.00	13.50

Commercial bank deposit rates

at or near end of month

	1980	1981	1982	1983		1984					
	Dec	Dec	Dec	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
United States	16.25	12.62	8.25	9.30	9.70	9.40	9.77	10.35	10.50	11.50	11.70
Canada	17.00	15.20	9.85	9.50	9.82	9.80	9.90	10.65	10.70	11.50	12.45
Austria	11.25	9.63	6.25	6.37	6.50	6.50	6.25	6.44	6.56	6.88	6.88
Belgium	12.63	15.50	12.25	11.25	11.25	10.87	12.37	11.75	11.50	11.88	12.50
Denmark	10.00	10.00	9.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Finland	5.00	5.00	4.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25
France	11.25	9.16	8.24	7.70	7.66	7.72	7.76	7.76	7.76	7.55	7.55
Germany	8.00	9.50	6.00	5.80	5.90	5.65	5.40	5.35	5.35	5.65	5.60
Ireland	13.62	18.38	15.25	12.25	11.75	11.87	12.37	12.63	12.50	12.50	12.25
Italy	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25	11.64	11.64
Netherlands	9.50	11.00	5.37	6.19	6.13	5.94	6.00	6.06	5.75	6.00	6.13
Norway	11.00	12.75	13.50	12.50	12.75	13.00	12.50	12.75	12.75	12.50	12.50
Portugal	12.00	14.00	15.00	21.50	21.50	21.50	21.50	21.50	21.50	21.50	28.00
Spain	4.50	11.78	12.53	12.50	12.62	12.49	12.52	12.35	12.64	12.49	n.a.
Sweden	13.20	12.65	12.15	12.30	11.70	11.00	11.10	10.65	10.65	11.25	13.65
Switzerland	7.50	8.75	3.00	3.50	3.50	3.25	3.25	3.00	3.00	3.25	3.25
United Kingdom	14.87	15.69	10.31	9.22	9.31	9.37	9.25	8.88	8.91	9.94	9.44
Australia	12.71	15.65	10.20	10.35	10.40	11.25	12.20	13.13	13.36	13.43	12.80
Japan	9.00	6.50	7.00	6.60	6.50	6.52	6.63	6.50	6.35	6.50	6.45
New Zealand	13.50	15.50	16.50	10.75	11.50	13.75	10.00	10.00	14.75	16.50	15.00
South Africa	7.87	14.75	15.25	18.43	20.13	19.45	18.88	19.38	18.88	18.78	18.65
Argentina	72.00	86.76	103.42	176.41	176.41	139.91	121.66	121.66	158.17	158.17	158.17
Brazil	54.00	110.05	21.00	24.00	23.00	26.00	25.00	23.00	19.00	22.00	22.00
Chile	39.45	36.87	57.72	25.19	22.28	19.74	12.95	11.09	18.16	18.16	18.16
Hong Kong	13.00	12.50	7.50	9.00	9.00	7.00	5.50	5.50	8.00	9.50	12.50
Korea	14.82	14.40	7.60	7.60	7.60	6.00	6.00	6.00	6.00	6.00	6.00
Malaysia	8.60	10.00	8.40	7.60	7.75	7.75	7.75	7.83	7.83	8.70	8.83
Mexico	26.15	31.82	52.54	54.84	54.70	53.86	51.21	47.63	47.30	n.a.	n.a.
Philippines	14.00	13.35	14.10	14.93	14.96	14.33	15.57	15.37	15.30	15.92	n.a.
Singapore	13.19	7.50	8.25	7.19	7.44	7.13	7.19	7.69	8.01	8.38	8.19
Taiwan	10.25	10.75	7.50	7.00	7.00	7.00	7.00	7.00	7.00	8.75	8.75
Thailand	9.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Venezuela	16.00	14.75	15.50	12.00	12.00	11.50	11.50	11.00	11.50	12.00	12.00

Domestic government bond yields

long-term issues, at or near end of month

	1980	1981	1982	1983		1984					
	Dec	Dec	Dec	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
United States	11.46	14.33	10.61	11.89	12.00	11.72	12.13	12.49	12.79	13.58	13.75
Canada	12.69	15.27	11.69	11.80	12.02	11.92	12.40	13.06	13.31	13.93	13.81
Austria	9.62	10.37	8.81	8.06	8.02	7.96	7.88	7.88	7.94	7.99	8.06
Belgium	13.04	13.99	12.66	11.75	11.89	11.97	12.35	12.20	12.08	12.19	12.13
Denmark	19.98	20.91	20.14	14.22	12.96	13.39	14.02	14.78	14.27	15.20	15.54
Finland	10.42	10.98	10.64	11.16	11.16	11.17	10.62	11.19	10.80	11.20	11.29
France	14.31	16.44	15.40	14.12	13.96	13.76	13.78	14.05	13.81	13.82	13.99
Germany	9.19	9.71	7.90	8.34	8.38	8.33	8.13	8.18	8.18	8.29	8.25
Ireland	15.63	18.28	14.54	13.72	14.25	13.94	14.16	14.08	14.14	14.49	14.58
Italy	16.23	21.39	19.70	17.78	17.69	16.91	16.34	15.69	15.75	15.75	n.a.
Netherlands	10.48	11.28	8.16	8.57	8.58	8.57	8.56	8.40	8.45	8.52	8.68
Norway	10.44	12.37	13.32	12.50	12.50	12.50	12.25	12.25	12.25	12.00	12.00
Portugal	17.19	17.39	16.63	22.80	22.11	21.19	21.57	21.97	22.37	n.a.	n.a.
Spain	16.15	16.20	15.92	19.50	18.71	18.33	18.68	18.74	18.64	n.a.	n.a.
Sweden	12.61	12.80	13.01	13.05	12.30	11.70	11.50	11.50	11.65	12.60	14.01
Switzerland	4.63	5.40	4.22	4.63	4.54	4.50	4.56	4.37	4.47	4.61	4.69
United Kingdom	13.05	15.02	10.62	9.93	9.94	9.97	10.04	9.89	10.16	10.73	10.81
Australia	13.00	15.00	13.00	13.40	13.65	13.70	14.05	14.00	14.00	14.10	14.00
Japan	9.04	8.32	7.76	7.39	7.19	7.20	7.06	6.74	6.68	7.45	7.46
New Zealand	12.99	12.55	12.84	10.61	10.50	10.84	11.33	10.42	n.a.	n.a.	n.a.
South Africa	11.81	13.33	11.31	13.63	13.64	14.13	13.80	13.78	14.46	14.68	14.72
Philippines	13.20	13.01	13.64	13.76	14.47	14.42	14.61	13.67	18.47	18.45	n.a.
Venezuela	7.39	12.50	15.00	14.00	13.50	13.00	13.00	13.00	13.50	14.00	14.00

Commercial bank lending rates to prime borrowers

at or near end of month

	1980	1981	1982	1983		1984					
	Dec	Dec	Dec	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
United States	21.50	15.75	11.50	11.00	11.00	11.00	11.00	11.50	12.00	12.50	13.00
Canada	18.25	16.50	12.50	11.00	11.00	11.00	11.00	11.50	11.50	12.00	12.00
Austria	12.50	13.50	11.75	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25
Belgium	15.75	18.00	15.50	13.25	13.75	13.75	14.75	14.75	14.75	14.75	14.75
Denmark	13.75	15.00	14.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Finland	9.83	9.84	8.95	10.15	10.18	10.30	10.36	10.38	10.42	10.43	n.a.
France	12.25	14.00	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25
Germany	11.50	13.00	8.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75
Ireland	14.50	17.25	16.50	13.75	13.75	13.75	13.75	13.75	13.75	13.75	13.75
Italy	20.50	22.50	20.75	18.75	18.75	18.50	18.50	17.50	17.50	17.00	17.00
Netherlands	10.75	12.00	6.25	6.50	7.00	6.75	6.75	6.75	6.50	6.50	6.50
Norway	12.50	13.75	14.50	13.75	13.50	13.63	13.75	13.30	13.30	12.75	13.00
Portugal	18.75	20.50	23.50	30.00	30.00	30.00	30.00	30.00	30.00	29.00	29.00
Spain	18.50	17.04	19.00	22.87	20.85	20.01	20.55	19.44	17.96	17.55	n.a.
Sweden	14.00	15.00	15.00	13.50	13.50	13.50	13.50	13.50	13.50	13.50	14.50
Switzerland	5.75	8.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
United Kingdom	14.00	14.50	10.00	9.00	9.00	9.00	9.00	8.50	8.50	9.00	9.25
Australia	13.50	15.75	15.00	13.25	12.75	11.50	13.00	14.00	15.50	15.00	14.75
Japan	8.16	6.95	6.28	6.08	5.89	5.81	5.77	5.76	5.80	5.80	5.80
New Zealand	13.00	13.00	13.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
South Africa	9.50	17.00	18.00	19.00	20.00	20.00	20.00	20.50	20.50	20.50	20.50
Argentina	77.00	92.60	109.50	188.58	188.58	152.08	133.83	133.83	170.33	170.33	170.33
Brazil	120.10	152.40	23.81	24.00	24.00	24.00	24.00	24.00	23.00	26.00	26.00
Chile	49.55	61.43	85.19	40.40	35.11	31.43	22.75	21.26	34.35	33.04	32.30
Hong Kong	17.00	16.00	10.50	13.50	13.50	11.50	10.00	10.00	12.00	12.75	13.75
Indonesia	21.00	19.25	22.00	19.50	19.75	20.00	21.25	21.50	20.75	21.00	20.75
Korea	19.50	16.50	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Malaysia	8.50	12.00	12.50	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.50
Mexico	24.25	31.81	46.12	56.82	56.44	55.95	55.16	53.11	51.10	50.12	50.38
Philippines	16.00	18.00	18.00	18.00	18.00	18.00	18.00	22.00	22.00	24.00	n.a.
Singapore	13.60	11.83	9.33	8.93	8.98	9.05	9.03	9.20	9.63	9.98	10.08
Taiwan	16.20	15.25	10.75	10.25	10.25	10.25	10.25	10.25	10.25	10.00	10.00
Thailand	16.50	17.00	13.00	15.50	16.00	16.00	16.50	17.00	17.00	17.00	17.00
Venezuela	15.00	15.50	17.00	16.00	16.00	16.00	14.50	14.50	15.00	15.00	15.00

Domestic corporate bond yields

long-term issues, at or near end of month

	1980	1981	1982	1983		1984					
	Dec	Dec	Dec	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
United States	13.00	15.50	11.75	12.38	12.63	12.38	12.88	13.25	13.88	13.58	14.50
Canada	13.53	16.18	12.74	12.58	12.89	12.78	13.27	13.84	14.13	14.59	14.69
France	15.23	17.33	15.91	14.30	14.06	13.96	14.28	14.37	14.23	13.88	13.77
Germany	9.50	10.50	8.20	8.30	8.30	8.30	8.00	8.00	8.00	8.00	8.00
Netherlands	10.71	11.03	7.80	8.53	8.51	8.44	8.39	8.26	8.28	8.35	8.43
Norway	11.24	13.36	14.13	13.25	13.25	13.25	13.00	13.00	13.00	12.75	12.75
Spain	14.82	14.76	17.10	20.03	19.84	20.19	20.69	21.90	22.54	22.06	21.63
Sweden	11.95	12.94	13.37	12.51	12.21	12.15	11.96	11.84	12.04	12.23	14.03
Switzerland	n.a.	n.a.	4.87	4.94	4.94	4.93	4.91	4.85	4.91	5.10	5.07
United Kingdom	14.21	16.65	12.34	11.51	11.57	11.52	11.61	11.29	11.48	12.11	12.69
Australia	14.25	16.50	15.00	15.00	13.50	14.00	14.50	14.50	n.a.	n.a.	n.a.
Japan	8.60	7.70	7.55	7.27	7.09	7.05	7.04	6.92	6.89	7.16	7.13
Korea	28.20	26.90	15.90	14.20	14.20	14.30	14.00	13.60	13.00	13.20	n.a.
Venezuela	16.15	17.00	18.00	18.00	18.00	18.00	17.50	17.50	17.50	18.00	18.00

J. P. Morgan & Co. Incorporated
23 Wall Street, New York, NY 10015

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World Financial Markets

Morgan Guaranty Trust Company of New York

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Currency diversification for LDC external debt, 1

Statistical appendix, 7

Currency diversification for LDC external debt

Developing countries and their external creditors have been exploring various ways to ease debt-service burdens where financing problems have arisen. Several countries are negotiating to reschedule debt maturing over the next several years on terms that provide for longer grace periods when only interest payments will be made, lengthened periods over which principal amounts would be amortized, and lower effective interest charges. They also are seeking more favorable terms on new borrowings.

Banks already have extended more favorable terms, such as lower spreads and longer grace periods and final maturities to countries that are viewed as performing well under IMF-supervised adjustment programs and that are keeping current on their interest payments. Present or forthcoming rescheduling negotiations may lead to a further easing of terms.

Currency diversification is another approach to containing debt-service burdens, and one that merits fresh attention. This would involve redenominating a portion of existing debt or contracting new loans in currencies carrying lower market rates of interest than the dollar. Dollar interest rates in recent years have been considerably higher than interest rates on such currencies as the Japanese yen, German mark, and Swiss franc (see Table 1). These differentials have widened further during 1984. At present, the six-month LIBOR for Eurodollars is about 12% versus approximately 6¼% for Euroyen and Euromarks and 4¾% for Euro-Swiss francs.

Foreign borrowing by developing countries, especially from banks, has been predominantly in dollars. At least 80%-85% of the outstanding external debt of the major borrowing countries in Latin America is estimated to be denominated in dollars. Judging from the divergence between BIS-reporting banks' claims measured in constant versus current exchange rates, the dollar share of their debt to banks is even higher. This divergence over the period from the end of 1980 through the end of 1983, during which the dollar appreciated by 40% or more against most major European currencies and by nearly 15% against the yen, suggests that the nondollar portion of the bank debt of all non-oil developing countries did not exceed 15%. For Latin American countries it was less than 10%.

Had these countries diversified their borrowings into other major

Table 1

6-month LIBOR for various Eurocurrencies

averages of month-end rates, percent per annum

	1974-78	*1979-83*	*Jan-Jul 1984*
Dollar	8.27	13.26	11.40
German mark	5.46	8.43	6.30
Japanese yen	7.91	7.83	6.47
Swiss franc	4.32	5.46	4.20
French franc	11.93	15.74	14.61
Sterling	12.61	13.36	9.69

Table 2

Currency composition of public-sector external debt

percent of total

	Portion payable in				
			Of which		
	Dollars	*Other currencies*	*Marks*	*Yen*	*Swiss francs*
Denmark[1]	57	43	16	n.a.	11
Finland[1,2]	31	69	15	20	15
Ireland[1,2]	39	61	35	7	8
Sweden[1]	67	33	9	5	8
Australia[2,3]	26	74	19	25	20
Indonesia[4]	43	57	8	21	n.a.
New Zealand[5]	37	63	12	13	22
Thailand[6]	66	34	3	26	n.a.

[1]December 1983.
[2]Central government.
[3]June 1983.
[4]December 1982.
[5]March 1983.
[6]September 1983.

currencies to a greater extent, they would have realized substantial savings. Last year the Federal Reserve Bank of New York published a study showing that if the increases in the external debts to banks of non-oil developing countries during 1979-82 had been in a mix of dollars (67%) and other major currencies (33%), as opposed to dollars exclusively, those countries could have reduced their cumulative interest payments during the period by approximately $4½ billion, thanks to the lower interest rates that prevailed on most nondollar currencies. In addition, their outstanding debt in dollar terms at the end of 1982 would have been $11½ billion less due to the dollar's appreciation. These savings would have roughly doubled if maturing debt during the period also had been refinanced in the same mix of currencies. It should be noted that this study took no account of any reductions in the amount of new borrowing from banks that the interest payment savings might have permitted. It also implicitly assumed that the large-scale switching of the currency composition of new borrowing would not have affected the interest and exchange rates of the currencies involved.

The internationalization of financial markets has spurred the practice of diversifying borrowings by currency to take advantage of interest differentials. Many borrowers — corporations, governments and their agencies, and international institutions — regularly borrow in different currencies, weighing the trade-offs between interest rate differentials and exchange rate risks. As shown in Table 2, between one-third and two-thirds of the external debts of the governments or public sectors of several European and Asian-Pacific countries are payable in currencies other than dollars. Many developing countries have diversified at least a small portion of their external debt through their borrowings from the World Bank and other multilateral development lending agencies. The World Bank has borrowed actively in numerous currencies for a long time, taking advantage of interest differentials between the various currencies with the objective of minimizing its overall borrowing costs. While the World Bank passes on the exchange risks by lending the same currencies it has borrowed, it also passes on the resulting interest savings to developing-country borrowers.

Despite the potential for reducing interest costs, suggestions that developing countries act now to diversify the currency composition of their external debts have met a cautious reception. There is concern about the risk of future exchange rate losses, especially if diversification takes place when the dollar is so strong. Another question, in the case of borrowing on a floating rate basis, is whether interest rate differentials may narrow or possibly even reverse during the term of the borrowing, reducing or eliminating interest savings from currency diversification. Also, there are doubts

Table 3

Hypothetical loan assumptions

	Mark	*Swiss franc*	*Yen*	*Sterling*	*French franc*
LIBOR, % per annum	6.25	4.75	6.25	11.75	12.5
Weight in currency basket (%)	5.0	3.0	15.0	10.0	7.0
Exchange rate[1] in year 0	2.90	2.43	244.0	1.31	8.90
Scenario A					
Annual rate of dollar change[2]	—5.4	—6.8	—5.4	—0.2	0.5
Exchange rate in year 4	2.32	1.84	195.0	1.32	9.08
Exchange rate in year 8	1.85	1.39	156.0	1.34	9.26
Scenario B					
Annual rate of dollar change	—3.6	—5.0	—3.6	1.7	2.5
Exchange rate in year 4	2.50	1.98	211.0	1.22	9.82
Exchange rate in year 8	2.16	1.61	182.0	1.14	10.84
Scenario C					
Annual rate of dollar change	—7.2	—8.5	—7.2	—2.3	—1.5
Exchange rate in year 4	2.15	1.71	181.0	1.43	8.39
Exchange rate in year 8	1.60	1.21	134.0	1.56	7.90

[1]Units per dollar, except dollars per pound sterling.
[2]Calculated as the inverse of the interest rate differential.

about the wisdom of incurring liabilities in currencies without having earnings or assets in the same currencies, which would offer at least a partial hedge against exchange rate risks.

If existing interest rate differentials persist between the dollar and other currencies such as the yen, mark, and Swiss franc, however, the interest savings on diversified debt would be sufficient to offset exchange rate losses from a quite substantial dollar depreciation. Even if such losses eventually equal or even exceed cumulative interest savings over the life of a loan, a borrower can enjoy significant cash-flow benefits in the early years: the interest savings are immediate whereas the exchange rate losses on amortization payments occur later and are spread out, especially if loan terms provide for an initial grace period before amortization.

A hypothetical loan can illustrate the trade-off between exchange risks and interest costs through diversifying the currency mix of borrowings. Assume the loan amount is $100 million or its equivalent in a mix of currencies with a final maturity of eight years. Repayment of principal occurs in five equal annual installments, after a three-year grace period. The interest charge floats at 1% over the six-month LIBOR for all currencies, payable annually at the end of each year without fees or commissions. The dollar rate (12%) and those for the other currencies shown in Table 3 are assumed to be unchanged over the life of the loan and approximate present market levels. The currency composition of the multicurrency loan is a fixed basket with the dollar accounting for 60%. The remainder consists of marks (5%), Swiss francs (3%), yen (15%), sterling (10%), and French francs (7%). This composition by national currency approximates the breakdown by nationality of bank holdings of medium- and long-term public-sector external debt of the four largest Latin American borrowers. The dollar share combines the 36% participation of U.S. banks with the 24% held by banks whose home currencies are not represented in the basket.

Three exchange rate scenarios are used to compare the cash-flow implications of borrowing $100 million equivalent in this basket mix to the option of borrowing only dollars. Exchange rates under Scenario A reflect interest-rate parities derived from existing interest rate differentials. In this case, the depreciation of the dollar against the basket of currencies averages about 3% per annum — and close to 6% per annum against the three low-interest rate currencies. Under this scenario, the assumed dollar exchange rates vis-à-vis the mark, Swiss franc, and yen reach or ex-

ceed historical lows in six or seven years. Scenario B embodies a 2% per annum slower rate of dollar depreciation against the currency basket. Scenario C, in contrast, assumes a 2% per annum faster rate of dollar depreciation than in Scenario A.

Under Scenario A the savings on interest payments accrue annually throughout the life of the loan, thanks to the favorable interest rate differentials of the nondollar currencies (see Table 4). Almost all the savings on interest payments are generated by the relatively large differentials prevailing for the mark, the Swiss franc, and the yen vis-à-vis the dollar. The individual effects of the differentials with sterling and the French franc are small and practically offset each other. Collectively, these savings total $5.9 million, of which the major portion is concentrated in the early years prior to the onset of amortization payments. Net annual benefits turn negative beginning in the fourth year, the first repayment period, and continue negative for the remainder of the loan's life since dollar depreciation leads to annual exchange losses on amortization payments that are greater than the annual interest savings. On an undiscounted cumulative basis, the net benefits of mixed currency borrowing are a negative $3.8 million. However, the present value of the net benefits stream is zero, since, as mentioned earlier, the exchange rates assumed under Scenario A reflect interest parity values. Under present value criteria, a potential borrower might be indifferent to the borrowing options. But for a borrower facing near-term liquidity pressures, the mixed currency loan would be more advantageous owing to his improved cash-flow position in the early years arising from the positive net benefits from interest savings during the grace period. These savings naturally would be higher if the borrower opted for a loan with a foreign currency mix more heavily weighted toward the low-interest currencies such as the mark, Swiss franc, or yen.

The $7.6 million cumulative savings on interest payments in Scenario B surpass those of the earlier case due to the assumed slower rate of dollar depreciation. Moreover, the

Table 4

Hypothetical loan: net benefits from mixed currency borrowing
millions of dollars

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Cumulative	Present value[1]
Scenario A										
Savings on interest payments	1.3	1.2	1.0	1.0	0.7	—0.4	0.2	0.1	5.9	
Valuation adjustments on amortization	—	—	—	—1.2	—1.6	—1.9	—2.3	—2.7	—9.7	
Net benefits	1.3	1.2	1.0	—0.2	—0.9	—1.5	—2.1	—2.6	—3.8	0.0
Scenario B										
Savings on interest payments	1.3	1.3	1.3	1.3	1.0	0.7	0.5	0.2	7.6	
Valuation adjustments on amortization	—	—	—	—0.5	—0.7	—0.8	—1.0	—1.2	—4.2	
Net benefits	1.3	1.3	1.3	0.8	0.3	—0.1	—0.5	—1.0	3.4	3.2
Scenario C										
Savings on interest payments	1.2	1.0	0.8	0.6	0.3	0.1	0.0	—0.1	3.9	
Valuation adjustments on amortization	—	—	—	—1.9	—2.5	—3.1	—3.7	—4.4	—15.6	
Net benefits	1.2	1.0	0.8	—1.3	—2.2	—3.0	—3.7	—4.5	—11.7	—4.7

[1]Discounted at 12%.

cumulative valuation adjustments on amortization payments are less than half of those in Scenario A. As a result, the cumulative net cash flow improves and the present value of the net benefit stream is positive. A mixed currency loan would therefore be preferable to the all-dollar option under the assumptions of Scenario B.

The mixed currency loan is less favorable than the dollar option under Scenario C. In it the dollar weakening is steepest, bringing about smaller interest savings ($3.9 million) and larger exchange losses on amortization payments (—$15.6 million) than in either of the previous cases. The present value of the net benefit stream is negative. Nevertheless, the cash-flow benefits arising from interest savings during the early years persist and are significant.

The hypothetical loan assumes that interest rate differentials remain constant through time. Of course, these differentials could narrow, thereby lessening the interest savings offered by a floating rate loan denominated in a mix of currencies rather than in dollars alone. That would reduce the cushion for offsetting any exchange rate losses on principal payments. Still, some initial cash-flow benefits would result. Besides, it is far from certain that a narrowing of interest differentials would lessen the longer-term payoff from diversification. For example, if low inflation and market confidence in the United States persist, a narrowing of interest differentials might well be accompanied by a continuation of a strong dollar. Likewise, a sharp depreciation of the dollar might be associated with a widening of interest differentials.

In practice, accurate forecasting of interest and exchange rates is difficult, to say the least — witness, for example, the numerous mistaken predictions in recent years of the dollar's imminent decline. The hazards of forecasting reinforce the prudential case for LDCs to incur a portion of their debt in currencies other than the dollar to diversify their interest and exchange rate risks. Uncertainty also suggests the wisdom of implementing a currency diversification program gradually — along the lines of the averaging technique practiced by some stock market investors.

Some question whether a country should incur nondollar obligations if, as is the case with Mexico, its foreign exchange earnings are largely in dollars or its exports are priced in dollar terms in world markets. While a natural exchange rate hedge may make borrowing in currencies other than the dollar more attractive, the lack of such a hedge does not negate the potential benefits of diversification. In fact, borrowing a mix of currencies provides a degree of protection against commodity price fluctuations stemming from changes in the dollar's exchange rate against other major currencies. For example, if a weakening of the dollar leads to a strengthening in the dollar prices of the commodities exported by a country, the favorable effect on the latter's foreign exchange earnings may offset, at least in part, foreign exchange losses on debt-service obligations denominated in the currencies that appreciate against the dollar.

Not only does currency diversification offer benefits to borrowers, it also can be attractive for some lenders to provide credit in currencies other than the dollar. Indeed, a number of European and Japanese banks have indicated a keenness for the option to substitute their respective domestic currencies for dollars in the rescheduling of debts of several major Latin American countries. Funding loans in domestic currencies rather than dollars may be easier or more secure for nondollar-based banks. Moreover,

having assets and liabilities denominated in domestic currencies avoids changes in balance sheet values arising from exchange rate movements. Such valuation changes, for example, can affect the size and concentration of a bank's loan portfolio. They also can affect capital-asset ratios, for which minimum requirements are prescribed by supervisory authorities in a number of countries.

Officials in the major creditor countries generally have been receptive to the idea that their nations' banks switch from dollars to domestic currencies in lending to developing countries. Besides lessening the possible funding risks of the banks, domestic-currency lending may ease the concerns expressed by some central banks about the adequacy of their foreign exchange resources should they be called upon in their capacity as lenders of last resort to provide liquidity support to their nations' banks. However, large-scale switching from dollars to domestic currencies could have an impact on interest and exchange rates. This may be one reason why Swiss authorities, while indicating support for a switch by Swiss banks from dollar to Swiss franc lending to LDCs, have suggested they might have a different view toward an extensive shift by non-Swiss banks to Swiss franc lending. Nonetheless, the feasible extent of currency switching in LDC lending is not limited by the relative representation of the various national groups of banks in existing lending, given the presence of large, well developed offshore markets for most major currencies.

To the extent that bank lenders and officials in major creditor countries are receptive to switching loans from dollars to other currencies, it seems sensible for developing countries whose external debts are payable wholly or largely in dollars to consider diversifying the currency composition of their debts. In addition to achieving a prudent diversification of interest and exchange rate risks, such countries could secure some important cash-flow benefits, at least over the next few years, if interest rate differentials continue to be as wide as they are now and have been in recent years. These cash-flow benefits could improve the debtor country's current account performance and reduce its net new borrowing requirements.

Mexico, for example, is seeking to reschedule $50 billion or so of public-sector external debt to banks maturing in the next six years. If, instead of being rescheduled in dollars, the whole amount were recast in the mix of currencies (60% in dollars and 40% in five other currencies) used in the hypothetical loan discussed earlier, the interest and exchange rates assumed in Scenario A would reduce Mexico's net new borrowing requirements by approximately $750 million-$1 billion per annum during the next four to five years. To be sure, that is not a major portion of Mexico's aggregate debt-service obligation, but it does represent a saving of roughly three-quarters of a percentage point in total interest expense, and it amounts to one-third or more of Mexico's expected new money needs during the next several years. The interest saving is especially constructive given the importance that financial markets and regulators attach to a country's ability to service interest obligations as a criterion of creditworthiness. Thus, currency diversification not only represents prudent borrowing practice for developing countries, but may actually assist them in rebuilding creditworthiness.

Statistical appendix

For key to data in tables see April 1984 issue.

Nominal effective exchange rates, 8

Real effective exchange rates, 8

Eurocurrency deposit rates, 9

International bond issues — by currency, 9

International bond issues — by country of borrower, 10

International bond yields, 10

Eurocurrency bank credits — by country of borrower, 11

Eurocurrency market size, 11

Central bank discount rates, 12

Day-to-day money rates, 12

Treasury bill rates, 13

Representative money market rates, 13

Commercial bank deposit rates, 14

Domestic government bond yields, 14

Commercial bank lending rates to prime borrowers, 15

Domestic corporate bond yields, 15

Information herein is from sources considered to be reliable but is furnished without responsibility on the part of Morgan Guaranty Trust Company.

Nominal effective exchange rates

Index numbers, 1980-82 average=100. Each index shows a currency's trade-weighted appreciation or depreciation measured against 15 other major currencies, using averages of daily noon spot exchange rates in New York and bilateral trade weights based on 1980 trade in manufactures. Annual figures are calendar year averages.

	United States	Canada	Japan	Australia	France	Germany	Italy	United Kingdom	Austria	Belgium	Neth-erlands	Spain	Swit-zerland	Den-mark	Norway	Swe-den
Pre-June 1970 parities	114.6	114.4	69.0	116.4	111.1	66.2	226.2	147.5	80.6	91.1	82.1	143.2	51.3	113.0	92.3	119.6
Smithsonian central rates	103.1	121.9	77.2	116.7	109.8	68.9	220.9	146.7	80.6	92.3	82.9	142.7	53.2	110.8	90.9	117.6
1980	90.7	100.4	95.5	96.0	106.5	100.0	108.4	99.8	99.4	105.9	100.2	106.5	95.4	105.1	98.2	103.9
1981	99.5	100.2	105.8	104.0	100.4	97.2	98.8	102.1	98.9	101.8	97.1	99.4	98.3	99.2	100.1	103.3
1982	109.8	99.4	98.6	100.1	93.1	102.8	92.8	98.1	101.7	92.3	102.7	94.1	106.3	95.7	101.7	92.8
1983	114.2	100.8	107.8	92.0	87.3	107.6	90.3	91.6	103.6	90.0	105.0	78.4	111.5	86.4	99.4	82.2
1983																
August	117.0	101.2	106.2	91.5	85.6	106.5	89.6	94.0	103.1	89.2	104.1	77.0	112.3	94.5	100.3	82.8
September	116.7	101.3	107.1	92.2	85.6	106.9	88.9	93.8	103.3	88.8	104.2	76.7	112.4	94.9	100.9	82.6
October	114.8	101.0	110.7	93.5	85.4	108.0	88.6	92.2	103.8	88.7	105.0	76.0	113.2	95.2	100.8	82.3
November	116.5	100.9	110.7	94.8	85.1	107.1	88.3	92.8	103.2	88.4	104.4	75.9	112.8	94.6	100.9	82.7
December	118.0	100.4	112.1	94.2	84.7	106.8	88.0	91.8	102.8	88.2	104.1	75.8	113.8	94.0	99.5	83.1
1984																
January	119.1	100.5	113.3	95.5	84.1	106.5	87.6	91.5	102.6	87.7	103.7	76.3	113.8	93.6	99.2	83.4
February	117.3	100.2	111.9	97.3	84.7	108.0	87.0	91.4	103.5	88.3	104.3	77.1	112.2	94.0	99.0	82.9
March	115.4	98.0	114.7	97.2	85.3	109.0	87.2	89.8	104.2	89.0	105.0	77.2	111.7	94.6	98.7	83.5
April	116.7	97.5	115.7	95.1	85.2	108.6	87.3	88.9	104.1	89.0	104.8	78.1	111.3	94.0	98.9	83.7
May	119.5	96.8	114.6	95.1	84.6	107.7	86.9	89.1	103.8	88.8	104.4	78.4	110.9	93.6	99.1	83.6
June	120.2	96.2	113.3	93.0	84.9	108.2	87.0	88.6	104.2	88.9	104.6	78.0	110.1	93.8	99.1	83.4
July	124.2	95.4	110.3	90.3	84.6	107.7	87.3	87.7	104.1	89.3	104.0	77.3	107.9	93.7	97.4	84.4
July 6	123.5	95.4	110.8	91.7	84.7	107.7	87.5	87.7	104.3	89.2	104.3	77.5	109.0	93.7	98.1	84.3
13	124.1	94.9	111.2	90.0	84.7	107.9	87.5	87.0	104.0	89.2	104.2	77.2	108.3	93.7	97.6	84.3
20	124.2	95.0	110.8	90.2	84.5	107.7	87.3	87.8	104.2	89.3	104.0	77.3	108.0	93.8	97.2	84.4
27	124.5	95.9	109.9	90.2	84.5	107.6	87.2	88.3	104.1	89.4	103.8	77.4	107.1	93.6	97.1	84.5
August 3	124.7	96.6	110.5	91.0	84.3	107.3	87.1	88.1	103.9	89.3	103.6	77.1	107.5	93.4	97.1	84.5
10	124.5	96.7	111.2	91.6	84.2	107.1	87.1	88.2	103.8	89.1	103.7	77.0	108.0	93.5	97.3	84.6
17	123.9	96.8	111.5	91.6	84.4	107.3	86.6	88.2	103.7	89.3	103.9	76.5	108.9	93.5	97.1	84.4

Real effective exchange rates

Index numbers, 1980-82 average=100. Each index is the corresponding nominal effective exchange rate adjusted for differential inflation in wholesale prices of nonfood manufactures. Underlying price data are partly estimated. Index revisions reflect revised price information or, less frequently, adoption of new price indices to measure inflation in one or more countries.

	United States	Canada	Japan	Australia	France	Germany	Italy	United Kingdom	Austria	Belgium	Neth-erlands	Spain	Swit-zerland	Den-mark	Norway	Swe-den
1980	89.4	99.6	103.0	93.0	102.2	103.5	103.5	99.9	100.2	107.5	99.9	100.9	98.7	103.5	96.6	101.2
1981	100.6	100.0	104.6	102.7	100.1	97.3	98.7	102.3	99.1	100.3	97.6	99.4	98.7	99.2	100.9	102.1
1982	109.9	100.4	92.3	104.3	97.7	99.2	97.8	97.9	100.7	92.3	102.5	99.8	102.6	97.3	102.5	96.7
1983	112.7	103.1	96.6	100.0	95.9	99.3	100.1	92.0	101.6	92.1	101.8	90.5	105.3	98.8	101.3	91.5
1983																
August	115.5	103.9	93.8	99.7	94.6	98.2	99.1	94.4	100.7	91.7	101.1	89.0	106.0	96.2	101.1	93.3
September	114.1	104.4	94.9	101.0	95.1	98.3	99.5	94.4	100.6	90.8	101.1	89.5	105.7	97.7	103.3	92.5
October	113.2	103.3	97.4	102.3	95.5	98.9	99.7	92.5	101.4	90.8	101.0	89.1	105.9	98.4	102.6	92.4
November	114.4	103.2	97.4	104.0	95.4	97.7	100.0	93.3	100.8	90.8	100.2	89.6	105.8	96.6	102.4	93.3
December	115.5	103.0	98.5	103.8	95.5	97.3	99.9	92.1	100.4	90.3	99.7	90.5	106.4	95.6	101.5	94.1
1984																
January	116.1	103.7	99.1	105.4	94.3	96.7	100.3	91.9	102.1	89.8	100.4	91.7	106.0	95.2	101.3	95.1
February	114.1	103.4	97.6	107.4	95.5	97.7	100.0	91.9	102.9	90.0	101.2	92.9	104.3	96.5	101.5	94.7
March	112.0	101.6	99.8	107.5	96.4	98.5	100.6	90.6	103.6	90.5	101.7	93.9	103.9	96.2	101.0	95.7
April	113.1	101.4	100.4	105.5	96.7	98.1	101.2	89.9	103.1	90.1	101.3	94.5	103.3	95.5	101.0	95.6
May	115.9	100.4	99.1	105.7	96.4	97.0	101.2	90.2	102.4	89.6	101.3	94.5	102.8	95.5	101.7	95.8
June	116.3	100.2	97.7	103.7	97.0	97.3	101.8	89.6	102.5	89.4	101.5	94.4	102.1	95.4	101.5	96.0
July	119.9	99.6	95.3	100.8	97.1	96.7	102.5	88.9	102.1	89.4	101.0	93.6	99.9	95.3	99.7	97.2

Eurocurrency deposit rates

prime banks' bid rates, at or near end of month

		1981	1982	1983	1984						
		Dec	Dec	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Eurodollar	*overnight*	12.87	9.25	9.50	9.25	9.38	10.13	10.25	10.38	11.25	11.75
	one month	13.31	9.12	9.69	9.50	9.88	10.44	10.63	11.06	11.75	11.50
	three months	13.75	9.19	9.81	9.63	10.13	10.63	10.94	11.75	12.13	11.81
	six months	14.81	9.50	10.06	9.88	10.38	10.94	11.25	12.50	12.63	12.25
	twelve months	14.75	9.62	10.37	10.19	10.81	11.44	11.75	13.63	13.50	12.75
Euro-Canadian dollar	*one month*	15.37	10.00	9.12	9.63	9.63	10.00	10.00	10.69	11.75	12.44
	three months	15.37	10.00	9.50	9.63	9.81	10.38	10.50	11.38	12.13	12.75
	six months	16.37	10.13	9.75	9.88	10.00	10.69	10.94	12.31	12.69	13.06
	twelve months	16.37	10.25	10.00	10.06	10.38	11.19	11.44	13.38	13.50	13.25
Euro-French franc	*one month*	15.75	23.00	12.12	12.13	16.00	12.94	11.94	12.00	11.81	11.38
	three months	17.00	24.00	12.19	13.00	17.25	14.38	13.13	13.19	12.31	11.75
	six months	18.00	22.00	12.31	13.75	16.75	15.13	13.88	14.19	13.25	12.69
	twelve months	18.25	19.75	12.62	14.38	16.13	15.88	14.88	14.94	14.56	13.63
Euromark	*one month*	10.44	5.87	5.25	5.69	5.69	5.50	5.44	5.63	5.56	5.25
	three months	10.50	5.87	5.87	5.88	5.81	5.56	5.63	5.94	5.88	5.75
	six months	10.56	5.94	6.12	6.19	6.94	5.75	5.75	6.25	6.19	6.13
	twelve months	10.25	6.00	6.37	6.38	6.19	6.13	6.19	6.81	6.75	6.56
Euro-Dutch guilder	*one month*	10.75	5.12	5.81	5.88	5.94	6.06	5.75	5.94	5.94	6.13
	three months	10.75	5.19	6.00	5.94	6.00	6.06	5.94	6.13	6.13	6.38
	six months	10.75	5.38	6.25	6.13	6.06	6.19	6.06	6.88	6.44	6.69
	twelve months	10.75	5.63	6.37	6.44	6.44	6.50	6.44	6.94	6.94	6.88
Euro-Swiss franc	*one month*	8.87	2.81	3.37	3.00	3.44	3.50	3.31	3.94	4.19	4.81
	three months	9.25	3.25	3.75	3.44	3.63	3.63	3.63	4.06	4.44	4.88
	six months	9.25	3.44	3.94	3.81	3.88	3.81	3.94	4.44	4.56	5.06
	twelve months	8.50	3.44	3.94	3.94	4.13	4.13	4.19	4.75	4.75	5.06
Eurosterling	*one month*	15.37	10.56	9.12	9.19	9.13	8.75	8.56	8.94	8.81	12.25
	three months	15.69	10.44	9.31	9.38	9.19	8.88	8.81	9.81	9.44	12.25
	six months	15.69	10.31	9.50	9.56	9.31	9.06	9.06	10.44	9.94	12.19
	twelve months	15.37	10.31	9.81	9.88	9.50	9.31	9.38	10.94	10.56	12.13
Euroyen	*one month*	6.12	6.75	6.25	6.13	6.88	6.19	6.00	6.38	6.00	6.13
	three months	6.12	6.75	6.31	6.31	6.56	6.19	6.19	6.38	6.19	6.31
	six months	6.87	7.10	6.38	6.31	6.50	6.25	6.25	6.44	6.31	6.31
	twelve months	6.87	6.81	6.44	6.44	6.63	6.38	6.31	6.56	6.50	6.50
European currency unit	*one month*	14.63	12.44	8.63	8.81	9.00	10.00	8.81	9.00	9.00	9.31
	three months	14.75	12.31	9.06	9.19	9.31	10.00	9.06	9.38	9.31	9.63
	six months	15.00	12.00	9.44	9.44	9.63	10.00	9.56	9.88	9.81	10.06
	twelve months	14.56	11.19	9.63	9.63	9.94	10.13	10.00	10.25	10.25	10.31

International bond issues — by currency

new issues with a maturity of three years or more, publicly offered or privately placed in the period
millions of dollars

	1981	1982	1983	1984			Jan-Jul	
				May	Jun	Jul	1984	1983
Eurobonds	**31 616**	**51 645**	**48 501**	**2 642**	**4 994**	**4 246**	**39 188**	**28 141**
U.S. dollar	26 830	43 959	38 428	2 029	4 276	3 343	31 131	22 480
Canadian dollar	634	1 201	1 039	68	161	156	730	558
German mark	1 277	2 588	3 817	222	276	251	2 490	2 891
British pound	501	748	1 947	—	41	198	1 954	745
Japanese yen	368	374	212	65	43	—	348	148
European composite units	309	1 960	2 019	200	111	208	1 734	824
Other	1 697	795	1 039	58	86	90	801	495
Foreign bonds	**21 369**	**26 397**	**27 822**	**2 200**	**1 564**	**1 847**	**17 421**	**17 427**
U.S. dollar	7 552	5 946	4 545	200	19	150	3 437	3 013
German mark	1 310	2 952	2 671	153	110	201	1 219	1 780
Dutch guilder	481	956	1 053	227	48	94	656	715
British pound	746	1 214	811	125	117	89	833	279
Swiss franc	8 285	11 432	14 299	927	1 147	654	8 569	9 142
Japanese yen	2 457	3 418	3 772	542	106	638	2 421	2 194
Other	538	479	671	26	17	21	286	304
Total	**52 985**	**78 042**	**76 323**	**4 842**	**6 558**	**6 093**	**56 609**	**45 568**

International bond issues — by country of borrower

new issues with a maturity of three years or more, publicly offered or privately placed in the period
millions of dollars

	1981	1982	1983	1984			Jan-Jul	
				May	Jun	Jul	1984	1983
Industrial countries	**40 861**	**63 062**	**60 303**	**3 937**	**6 171**	**4 906**	**49 180**	**35 308**
Australia	991	2 250	2 529	98	303	82	1 255	1 207
Austria	1 557	1 668	1 290	86	246	335	1 662	916
Belgium	527	211	1 116	43	400	—	750	383
Canada	10 648	11 979	7 487	272	455	298	4 117	3 992
Denmark	695	1 269	1 719	100	116	747	2 350	712
Finland	672	815	866	109	167	—	876	607
France	3 156	8 366	6 461	716	300	825	4 147	4 215
Germany	279	1 101	3 095	—	131	46	1 089	1 919
Ireland	517	625	959	55	37	—	264	290
Italy	1 108	2 214	1 565	59	226	—	887	429
Japan	6 925	8 397	13 977	1 309	1 884	1 293	12 353	9 204
Netherlands	630	894	935	32	—	—	677	651
New Zealand	1 107	1 375	645	65	32	144	619	448
Norway	530	832	624	65	100	18	485	347
Portugal	30	206	76	60	43	21	245	46
South Africa	92	374	548	155	139	—	627	360
Spain	444	747	1 470	—	—	70	772	737
Sweden	2 050	2 479	3 809	107	804	48	4 585	2 402
United Kingdom	1 408	1 201	1 398	150	—	240	2 276	634
United States	6 770	14 538	7 325	306	693	659	7 953	4 230
*Other**	722	1 501	2 409	150	95	80	1 191	1 582
Developing countries	**4 886**	**5 003**	**2 535**	**206**	**148**	**256**	**1 433**	**1 598**
Latin American countries	**3 658**	**2 480**	**71**	**31**	**19**	—	**50**	**71**
Argentina	195	—	—	—	—	—	—	—
Brazil	60	91	—	—	—	—	—	—
Chile	30	—	—	—	—	—	—	—
Colombia	20	35	—	—	—	—	—	—
Mexico	3 012	1 919	—	—	19	—	19	—
Panama	25	—	21	—	—	—	—	21
Venezuela	291	385	—	—	—	—	—	—
*Other***	25	50	50	31	—	—	31	50
Asian countries	**1 068**	**2 075**	**2 252**	**175**	**129**	**256**	**1 343**	**1 375**
Hong Kong	70	40	50	—	—	—	—	—
India	271	225	60	25	46	—	121	40
Indonesia	97	412	328	20	30	—	50	37
Korea	323	172	556	95	21	45	361	395
Malaysia	—	807	883	35	32	123	540	724
Philippines	99	50	—	—	—	—	—	—
Singapore	30	125	70	—	—	—	—	—
Thailand	93	63	265	—	—	46	229	139
Other	85	181	40	—	—	42	42	40
Middle Eastern and African countries	**160**	**448**	**212**	—	—	—	**40**	**152**
Egypt	—	75	—	—	—	—	40	—
Israel	117	200	135	—	—	—	—	135
United Arab Emirates	—	20	—	—	—	—	—	—
Other	43	153	77	—	—	—	—	17
Centrally planned countries	**75**	**65**	**75**	—	—	—	—	**25**
China	—	65	50	—	—	—	—	—
Hungary	20	—	—	—	—	—	—	—
*Other****	55	—	25	—	—	—	—	25
International organizations****	**7 163**	**9 912**	**13 410**	**699**	**239**	**831**	**5 856**	**8 637**
Total	**52 985**	**78 042**	**76 323**	**4 842**	**6 558**	**6 093**	**55 609**	**45 568**

*Includes multinational organizations. **Includes unallocated. ***Includes COMECON institutions. ****Includes regional development organizations.

International bond yields

average yield of several actively traded, high quality issues with a maturity of 7 to 12 years
at or near end of month

	1981	1982	1983	1984						
	Dec	Dec	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
United States companies											
Eurodollar	n.a.	11.16	11.41	11.59	11.43	11.77	12.28	12.53	13.33	13.27	12.70
Euromark	n.a.	7.24	7.23	7.34	7.34	7.26	7.24	7.29	7.55	7.48	7.74
Swiss franc	n.a.	5.61	5.73	5.73	5.58	5.61	5.63	5.59	5.85	5.69	5.68
European governments											
Eurodollar	n.a.	12.53	12.52	12.65	12.33	12.58	12.96	13.27	14.18	14.14	13.61
Euromark	n.a.	8.10	8.07	8.12	8.08	7.63	7.82	7.88	8.03	8.07	8.31
Swiss franc	n.a.	5.36	5.52	5.59	5.43	5.33	5.34	5.35	5.59	5.55	5.43
European currency unit	n.a.	n.a.	11.75	11.77	11.53	11.08	11.29	11.49	11.40	11.63	11.60

Eurocurrency bank credits — by country of borrower

credits with a maturity of one year or more, publicly announced in period
millions of dollars

	1981	1982	1983	1984			Jan-Jul	
				May	Jun	Jul	1984	1983
Industrial countries	**86 022**	**42 571**	**38 742**	**3 948**	**7 894**	**5 648**	**55 257**	**19 392**
Australia	1 680	4 721	2 924	426	—	—	906	1 819
Belgium	360	1 172	883	—	—	—	—	83
Canada	4 112	3 838	967	350	—	750	1 872	200
Denmark	1 661	789	1 586	1 000	—	—	1 018	1 586
Finland	463	631	283	—	15	—	15	228
France	3 912	5 703	1 700	—	1 050	—	1 792	1 237
Greece	1 039	770	1 085	—	—	210	610	797
Ireland	1 361	401	764	—	—	71	71	621
Italy	6 030	3 757	2 980	200	36	436	1 593	1 755
Norway	713	1 769	1 236	—	—	—	24	356
Portugal	1 590	1 388	913	—	400	—	696	300
South Africa	287	1 479	752	160	—	40	350	702
Spain	3 242	1 849	3 041	737	144	100	1 861	1 959
Sweden	1 867	649	3 188	—	4 000	—	4 300	2 350
United Kingdom	747	1 635	1 328	417	71	911	2 716	604
United States	54 784	6 516	12 948	250	2 130	3 110	35 147	3 372
Yugoslavia	684	719	615	10	—	—	10	615
*Other**	1 490	4 785	1 549	398	48	20	2 276	808
Developing countries	**45 264**	**41 519**	**32 937**	**2 323**	**740**	**659**	**19 659**	**24 939**
Latin American countries	**30 152**	**26 719**	**15 406**	**904**	**120**	**160**	**11 729**	**13 181**
Argentina	2 534	1 565	1 750	—	—	—	—	250
Brazil	5 751	5 716	4 475	—	—	—	6 500	4 475
Chile	2 204	1 194	1 319	784	—	—	784	1 319
Colombia	1 030	741	549	34	—	—	204	310
Ecuador	934	815	431	—	—	—	—	431
Mexico	7 530	7 953	5 138	—	50	—	3 850	5 100
Peru	1 407	1 069	500	—	—	—	10	466
Venezuela	7 559	6 799	237	—	—	—	—	237
*Other***	1 203	867	1 007	86	70	160	381	593
Asian countries	**10 288**	**8 403**	**8 828**	**656**	**380**	**399**	**5 224**	**6 017**
India	377	284	809	—	6	15	246	585
Indonesia	725	1 250	1 467	50	—	100	932	1 146
Korea	2 824	2 923	3 250	522	95	120	2 245	1 553
Malaysia	1 725	1 909	950	—	19	—	669	860
Pakistan	350	455	365	—	—	—	—	340
Philippines	1 257	635	819	—	—	—	—	715
Thailand	692	268	349	20	253	—	520	234
Other	2 338	679	819	64	7	164	612	584
Middle Eastern and African countries	**4 824**	**6 397**	**8 703**	**763**	**240**	**100**	**2 706**	**5 741**
Algeria	—	26	1 934	20	180	—	200	726
Egypt	63	353	335	19	—	—	19	135
Morocco	774	326	226	—	—	—	115	226
Nigeria	1 802	2 042	1 775	—	—	—	—	1 711
Turkey	100	2 042	1 106	100	—	—	600	501
United Arab Emirates	363	93	876	—	—	—	39	690
Other	1 722	3 280	2 451	624	60	100	1 733	1 752
Centrally planned countries	**1 791**	**765**	**1 212**	**284**	**30**	**64**	**2 052**	**928**
East Germany	470	8	392	—	15	—	90	392
Hungary	550	340	683	—	—	—	797	408
Soviet Union	25	374	68	150	—	—	515	68
*Other****	746	43	69	134	15	64	650	60
International organizations***	**302**	**160**	**1 321**	—	—	—	—	**1 321**
Total	**133 379**	**85 015**	**74 212**	**6 555**	**8 664**	**6 371**	**76 968**	**46 580**

*Includes multinational organizations. **Includes unallocated. ***Includes COMECON institutions. ****Includes regional development organizations.

Eurocurrency market size

measured by foreign currency liabilities
at end of period, billions of dollars

	1977	1978	1979	1980	1981	1982	1983			1984
							Jun	Sep	Dec	Mar
Gross market size	740	949	1 233	1 524	1 861	2 057	2 045	2 115	2 144	2 257
Nonbanks	135	174	245	327	428	474	489	515	540	603
Official monetary institutions	100	115	145	150	132	90	84	90	89	90
Other banks	505	660	843	1 047	1 301	1 493	1 472	1 510	1 515	1 564
Eurodollars as % of gross	76	74	72	75	78	79	80	80	80	78

Central bank discount rates

at or near end of month

	1980	1981	1982	1983	1984				Current	
	Dec	Dec	Dec	Dec	Apr	May	Jun	Jul	Aug 20 1984	effective since
United States	13.00	12.00	8.50	8.50	9.00	9.00	9.00	9.00	9.00	Apr 9, 84
Canada	17.36	14.66	10.05	9.96	10.84	11.54	12.36	12.98	12.43	Aug 16, 84
Austria	6.75	6.75	4.75	3.75	4.25	4.25	4.50	4.50	4.50	Jun 28, 84
Belgium	12.00	15.00	11.50	10.00	11.00	11.00	11.00	11.00	11.00	Feb 16, 84
Denmark	11.00	11.00	10.00	7.00	7.00	7.00	7.00	7.00	7.00	Oct 27, 83
Finland	9.25	9.25	8.50	9.50	9.50	9.50	9.50	9.50	9.50	Jul 1, 83
France	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	Aug 31, 77
Germany	7.50	7.50	5.00	4.00	4.00	4.00	4.50	4.50	4.50	Jun 29, 84
Ireland	12.75	17.15	14.35	11.50	12.00	12.00	12.00	12.00	12.00	Mar 30, 84
Italy	16.50	19 00	18.00	17.00	16.00	15.50	15.50	15.50	15.50	May 5, 84
Netherlands	8.00	9.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	Sep 9, 83
Norway	9.00	9.00	9.00	8.00	8.00	8.00	8.00	8.00	8.00	Jun 6, 83
Portugal	18.00	18.00	19.00	25.00	25.00	25.00	25.00	25.00	25.00	Aug 10, 83
Spain	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	Jul 26, 77
Sweden	12.00	11.00	10.00	8.50	8.50	8.50	9.50	9.50	9.50	Jun 29, 84
Switzerland	3.00	6.00	4.50	4.00	4.00	4.00	4.00	4.00	4.00	Mar 18, 83
United Kingdom	14.00	14.37	10.00	9.00	8.50	9.00	8.88	11.88	10.88	Aug 9, 84
Japan	7.25	5.50	5.50	5.00	5.00	5.00	5.00	5.00	5.00	Oct 22, 83
New Zealand	14.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	Jul, 81
South Africa	7.00	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	Dec 12, 81
Argentina	87.01	98.50	128.54	183.75	167.37	167.37	167.37	199.94	199.94	Jul 1, 84
Korea	15.50	10.50	5.00	5.00	5.00	5.00	5.00	5.00	5.00	Mar 29, 82
Philippines	4.54	6.69	6.30	8.05	9.50	9.64	n.a.	n.a.	8.37	Mar, 84
Singapore	10.50	9.50	7.00	7.00	7.00	7.00	7.00	7.00	7.00	Feb 19, 82
Thailand	13.50	14.50	12.50	13.00	13.00	13.00	13.00	13.00	13.00	Dec 9, 83
Venezuela	13.00	14.00	13.00	11.00	11.00	11.00	11.00	11.00	11.00	May 18, 83

Day-to-day money rates

monthly averages

	1980	1981	1982	1983	1984						
	Dec	Dec	Dec	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
United States	18.90	12.37	8.95	9.47	9.56	9.59	9.91	10.29	10.32	11.06	11.23
Canada	15.61	14.53	10.63	8.78	9.60	9.63	9.50	9.72	9.78	10.75	11.41
Austria	11.50	7.50	6.00	5.75	5.87	5.87	6.00	6.38	6.50	6.50	6.50
Belgium	9.68	12.78	9.43	8.65	8.03	7.57	11.20	11.37	9.13	9.80	10.22
Finland	12.50	11.30	11.50	16.70	17.50	17.50	17.50	16.77	16.53	16.80	16.53
France	10.87	15.46	12.88	12.27	12.39	12.30	12.48	12.15	12.04	12.12	11.51
Germany	9.13	10.65	6.07	5.60	5.61	5.55	5.52	5.53	5.53	5.53	5.57
Ireland	13.31	16.88	14.54	12.19	12.12	11.25	10.75	12.12	11.75	10.94	12.00
Italy	17.50	20.63	19.00	17.88	17.91	17.67	17.25	17.25	16.93	16.75	16.75
Netherlands	8.37	10.67	5.31	5.84	5.77	6.12	6.13	5.79	5.62	5.85	5.98
Norway	11.00	18.60	11.00	13.00	12.80	11.45	13.00	13.00	13.00	12.50	12.00
Spain	16.74	18.73	20.30	16.41	10.16	18.14	14.75	11.54	11.93	11.91	11.15
Sweden	11.41	13.82	8.63	11.48	11.36	10.90	10.15	9.65	11.50	13.50	12.95
Switzerland	5.75	3.38	1.25	1.88	1.00	1.62	2.25	2.00	2.25	2.13	n.a.
United Kingdom	13.00	9.13	6.70	7.77	7.31	7.12	7.08	6.25	3.25	5.00	8.63
Australia	9.51	12.84	11.04	4.56	7.09	9.05	11.21	13.45	13.30	11.44	11.34
Japan	9.49	6.70	6.92	6.47	6.05	6.04	6.05	5.88	5.74	5.91	6.04
South Africa	6.03	12.75	14.15	16.06	17.13	17.25	17.25	17.25	17.25	17.25	18.06
Argentina	70 84	84.93	155.32	178.30	138.61	128.53	128.52	161.88	161.88	161.88	194.56
Brazil	62.71	103.74	150.42	184.69	224.27	295.48	268.44	217.98	198.78	226.75	283.79
Hong Kong	14.05	10.75	9.13	13.90	7.25	3.31	7.32	9.00	11.00	13.00	23.40
Korea	14.82	14.40	13.84	11.40	11.30	10.50	10.00	11.70	11.90	11.70	11.90
Philippines	15.70	14.70	16.12	31.18	25.52	21.76	9.99	17.93	33.17	40.17	n.a.
Singapore	10.23	3.96	11.45	7.05	6.92	6.83	7.64	8.13	7.82	6.80	7.67